

FIG.1

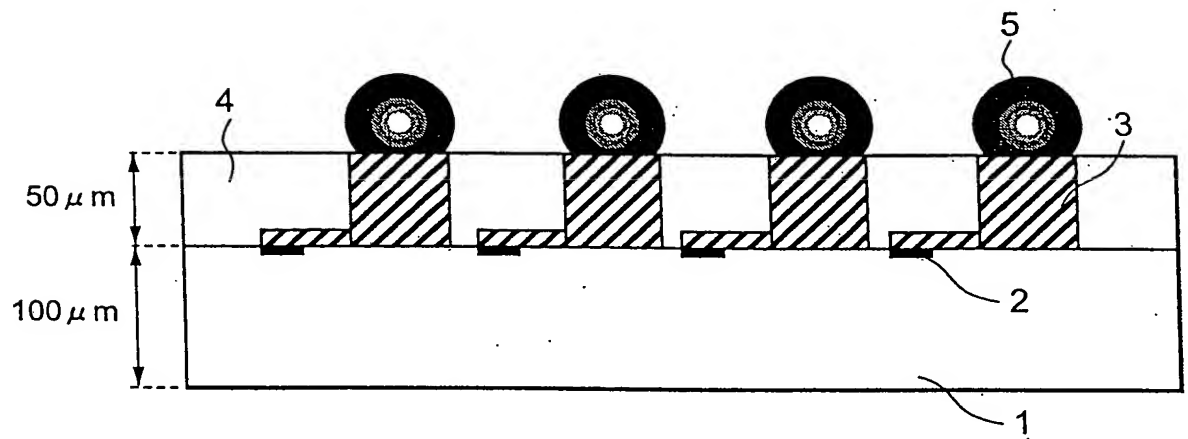
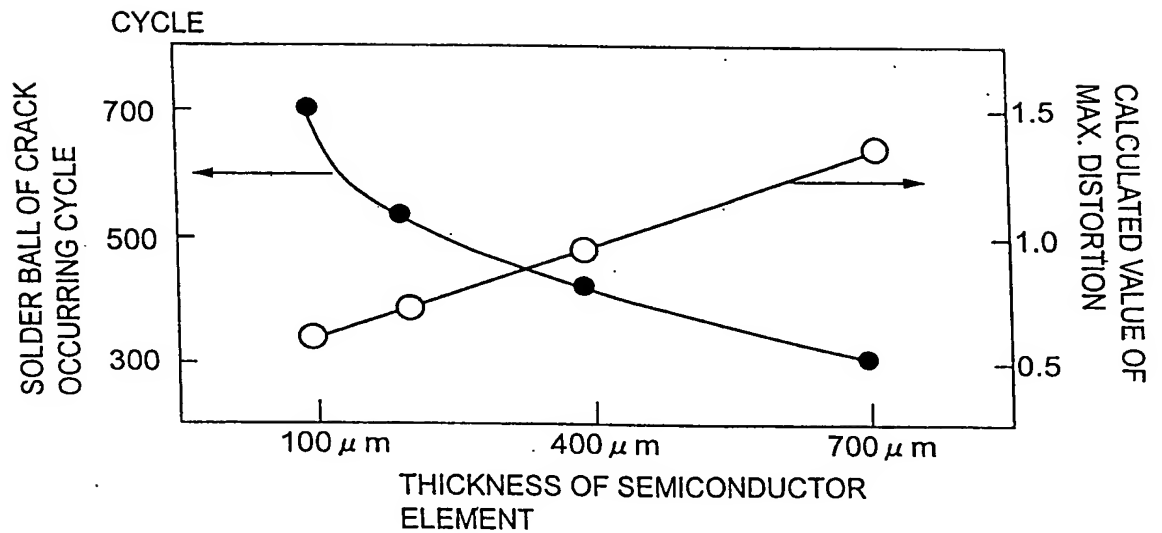
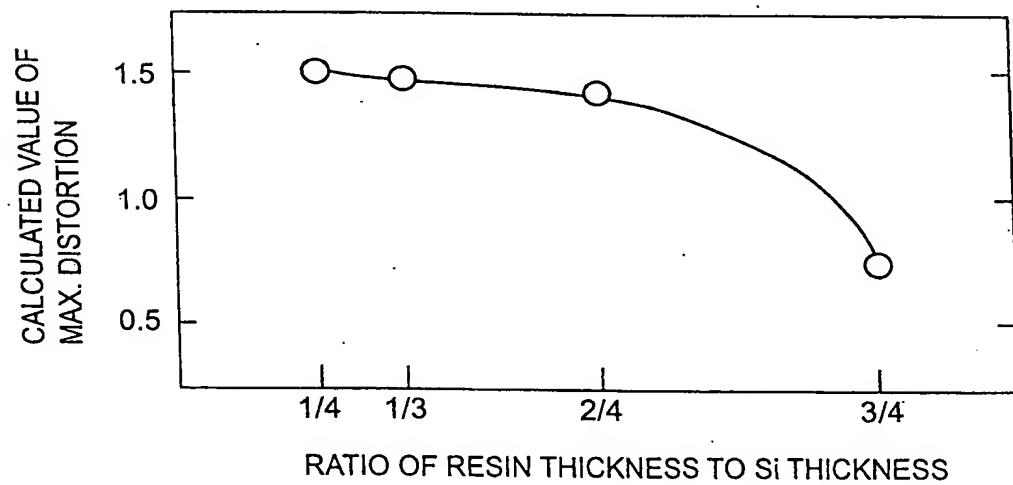


FIG.2A



DEVICE THICKNESS VS MAX. DISTORTION & FATIGUE OF SOLDER BALL

FIG.2B



RATIO OF RESIN THICKNESS TO Si THICKNESS VS MAX. DISTORTION OF SOLDER BALL

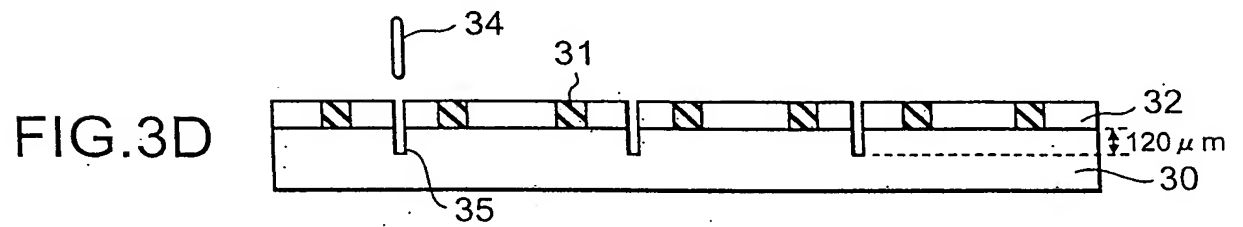
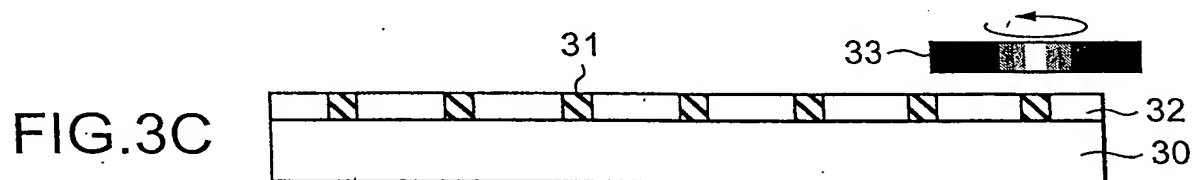
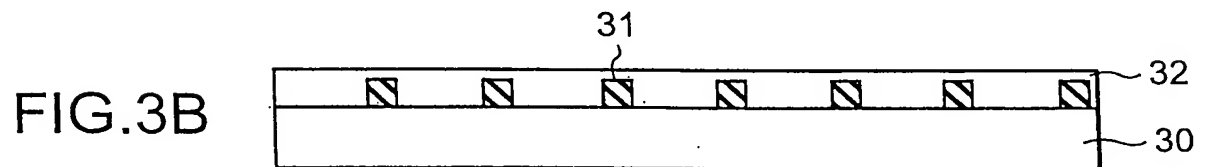
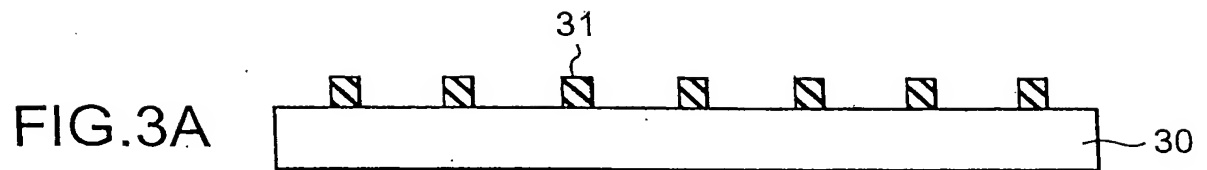


FIG.4A

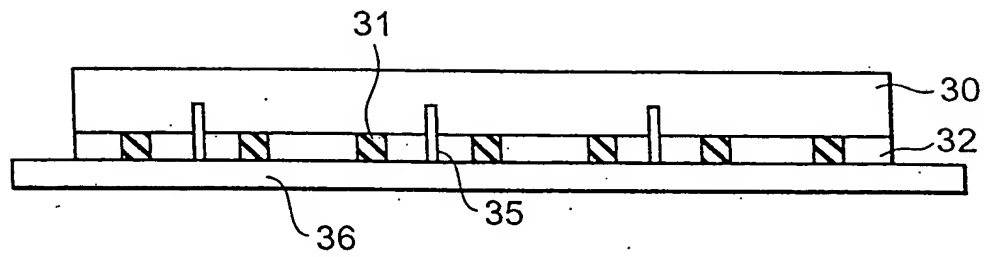


FIG.4B

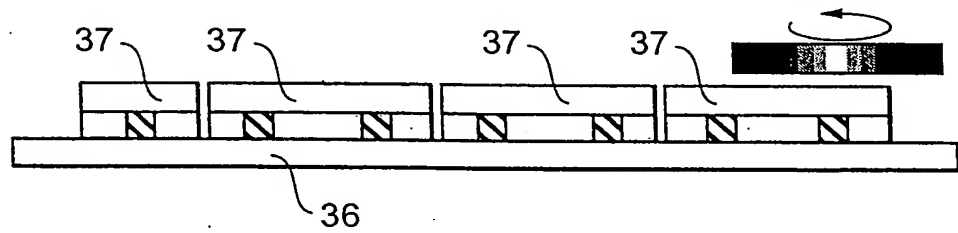


FIG.4C

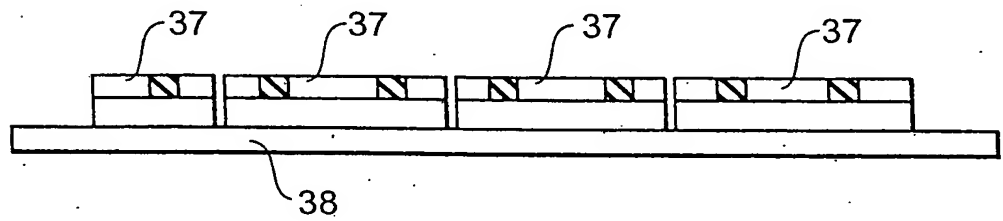


FIG.5

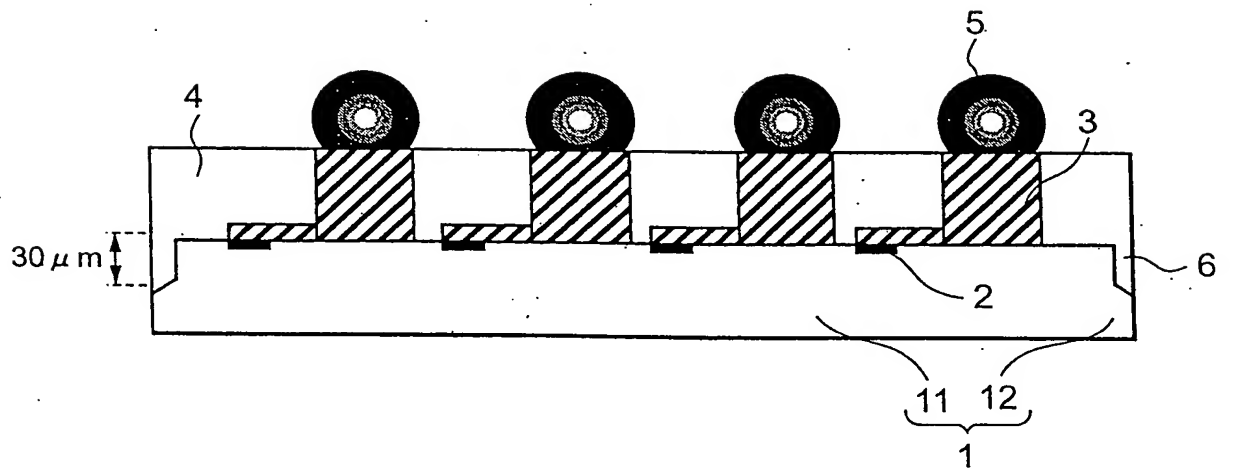


FIG.6A

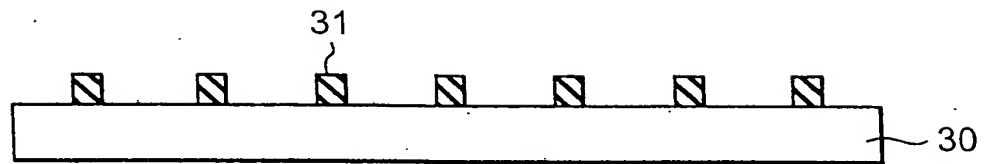


FIG.6B

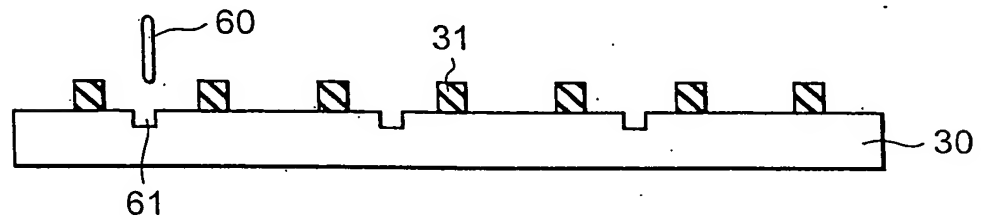


FIG.6C

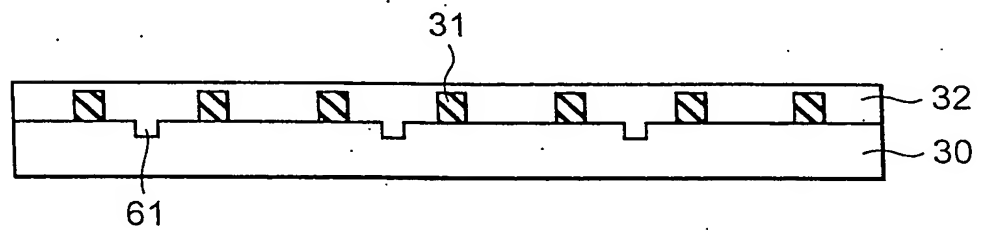
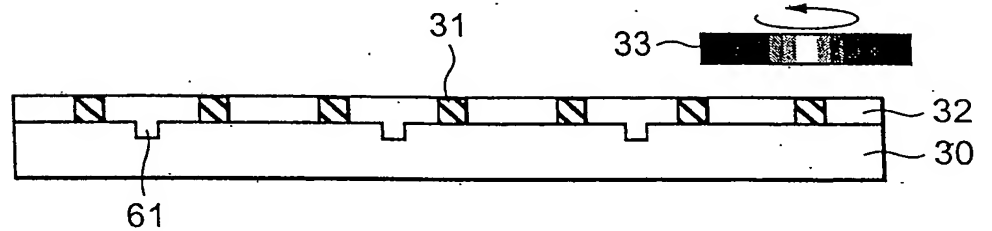


FIG.6D



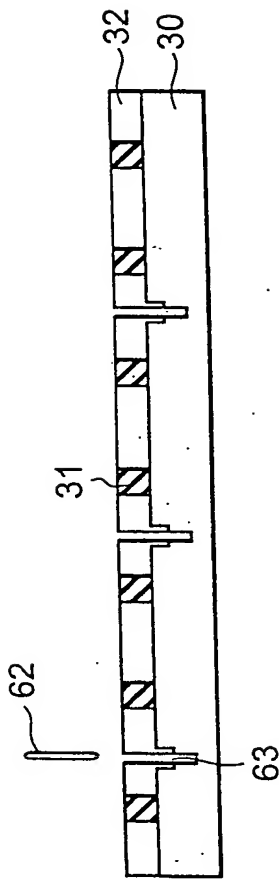


FIG. 7A

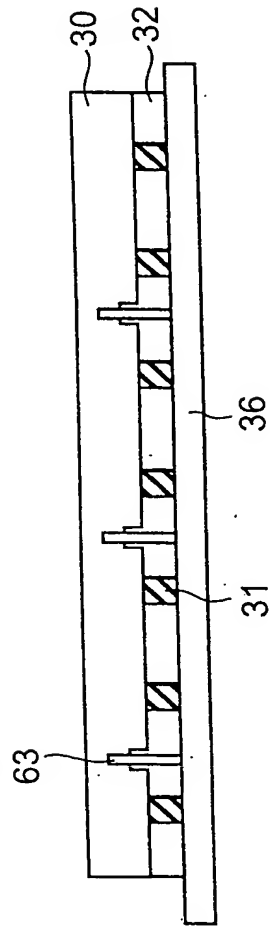


FIG. 7B

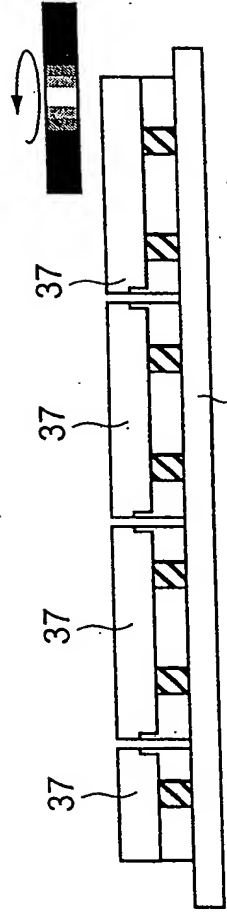


FIG. 7C

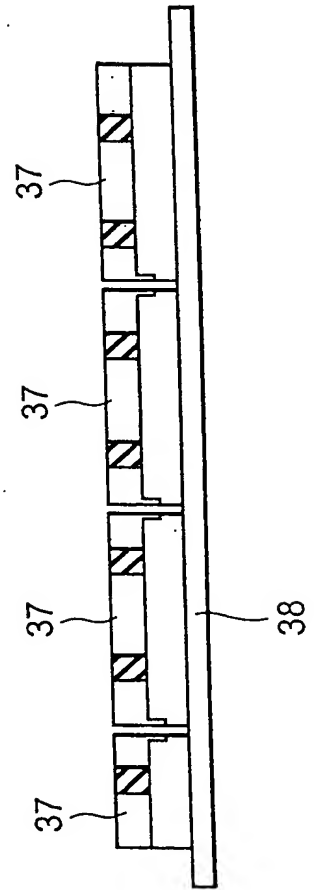


FIG. 7D

FIG.8

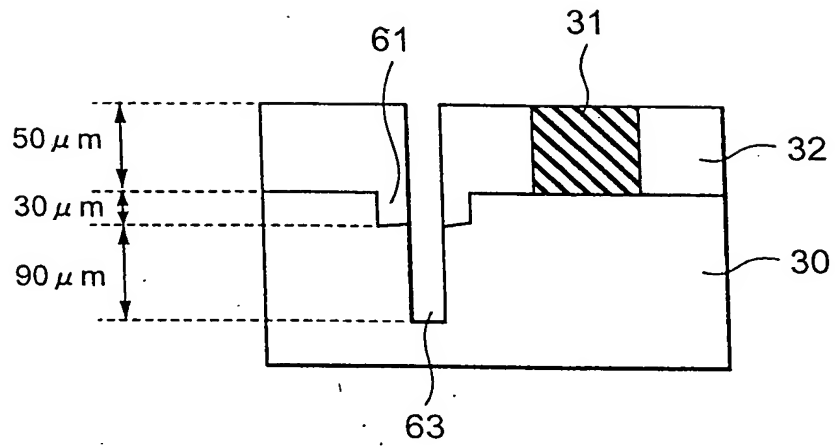
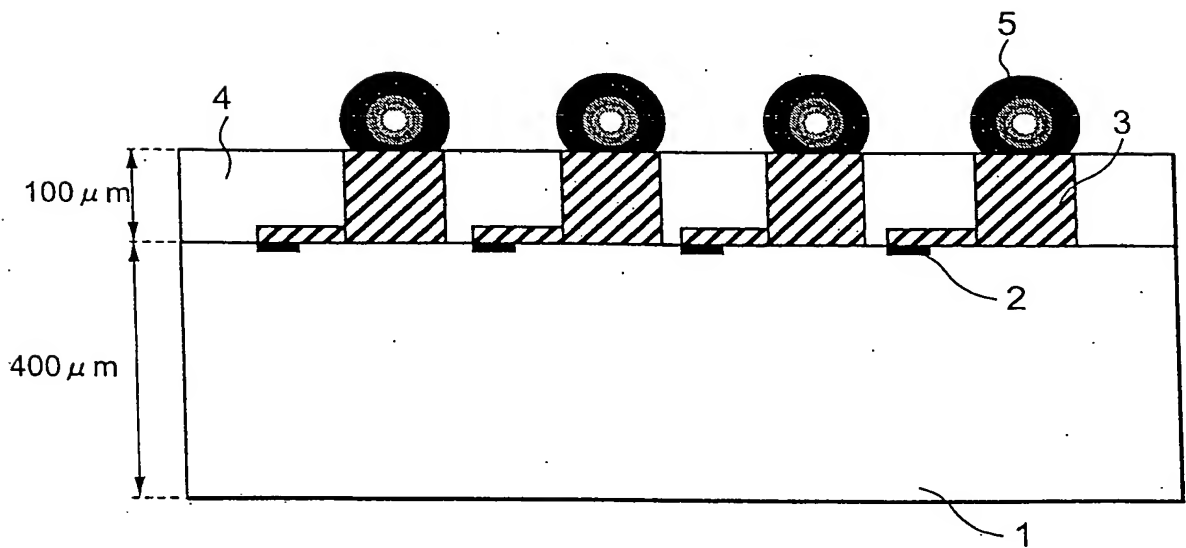


FIG.9





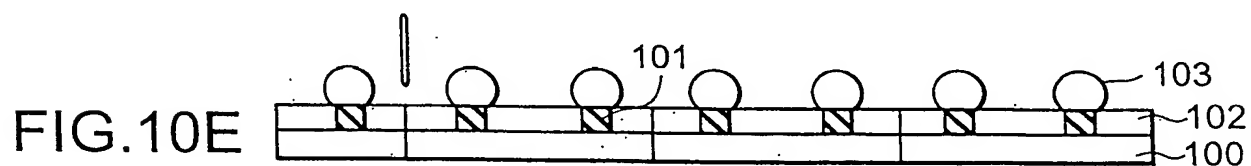
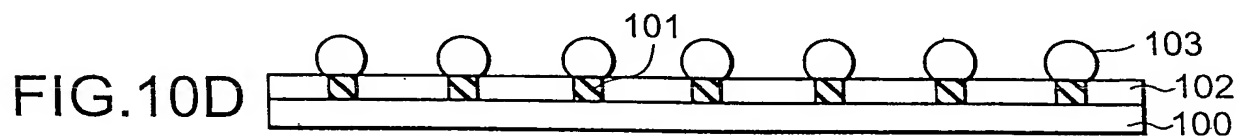
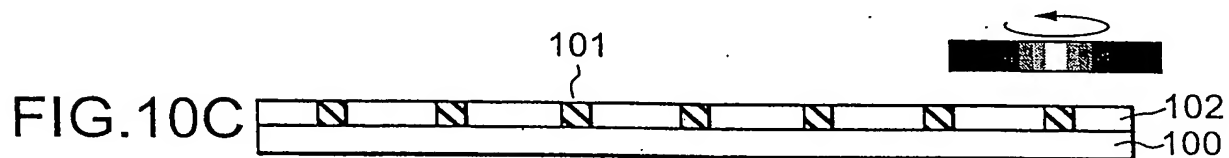
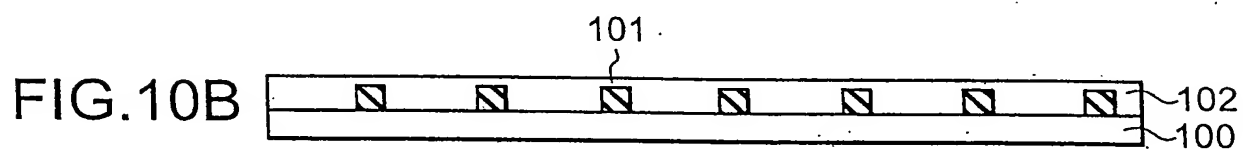
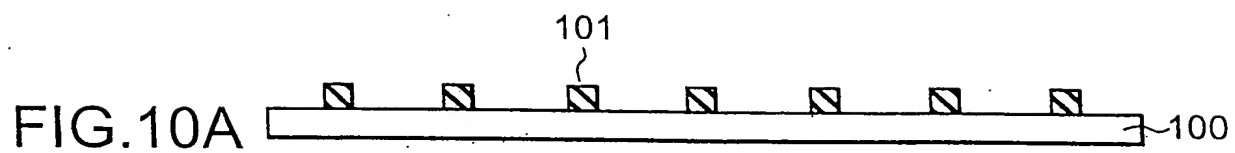


FIG.11

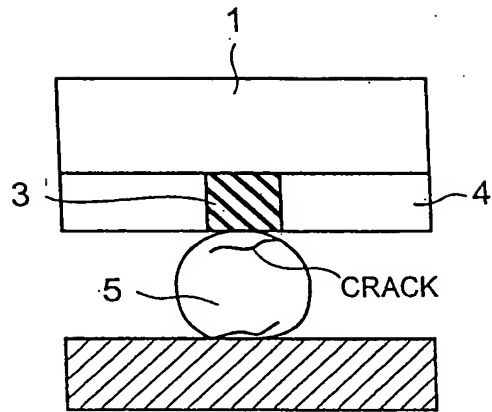
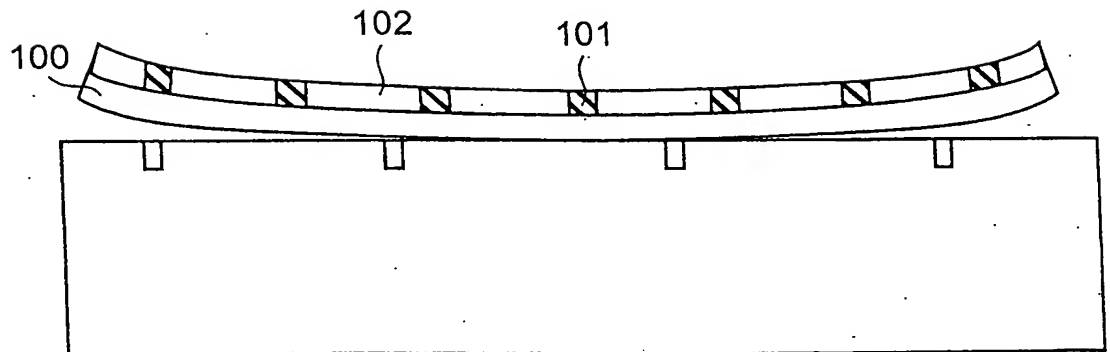


FIG.12



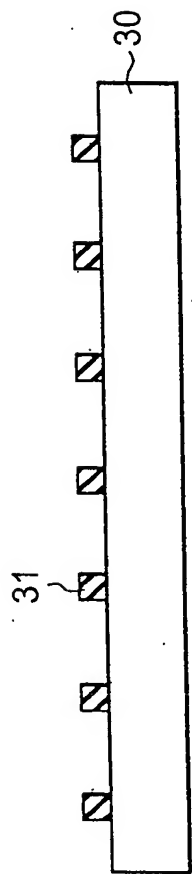


FIG. 13A

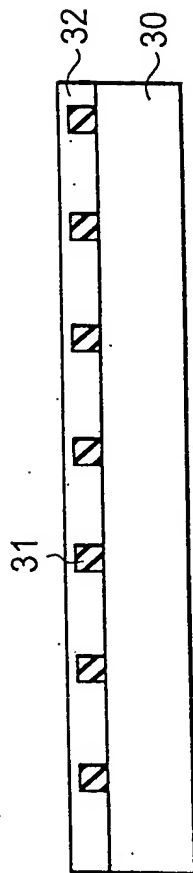


FIG. 13B

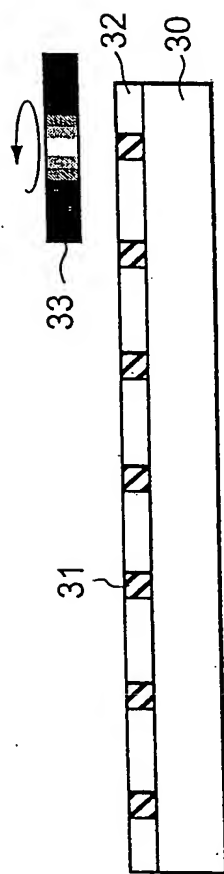


FIG. 13C

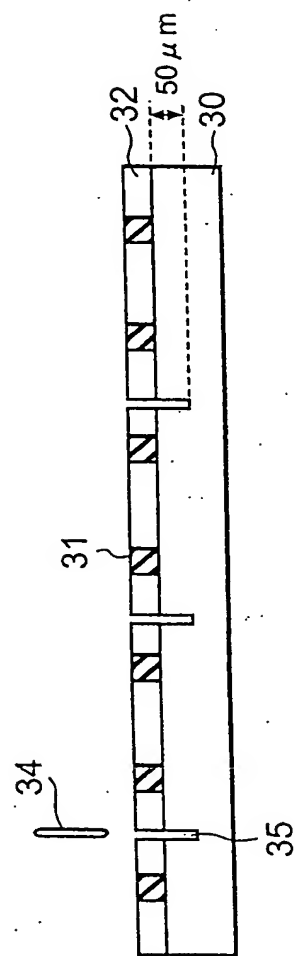


FIG. 13D

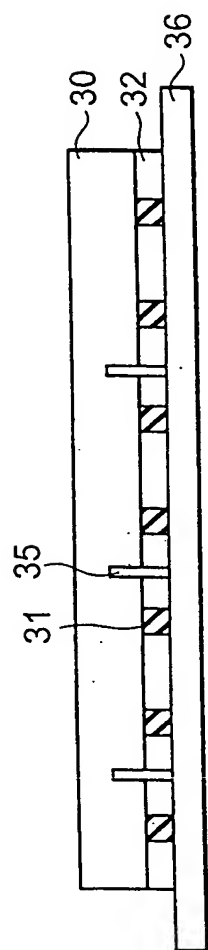


FIG. 14A

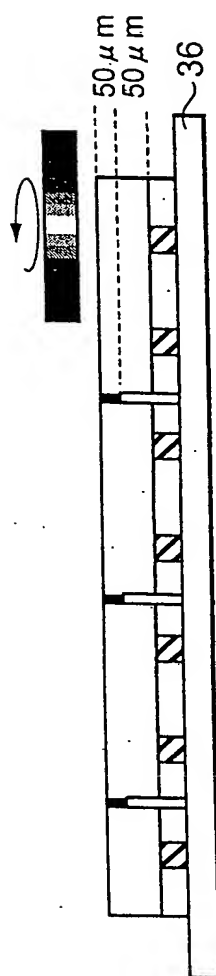


FIG. 14B

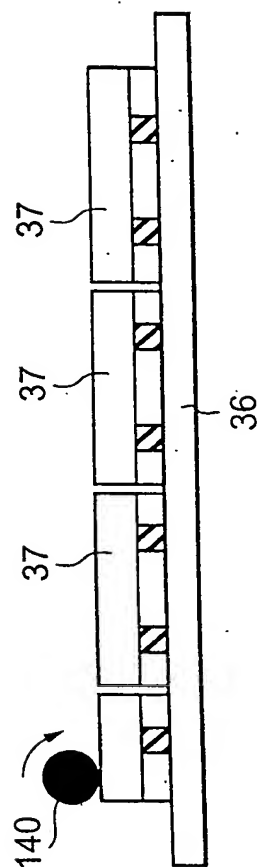


FIG. 14C